**Ms. Van De Meutter 2016 Math 9 Powers and Exponents Rubric (Outcome N9.1)**

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| 4 - Mastery | 3 - Proficient | 2 - Approaching | 1 - Beginning |
| **Shows depth of understanding; in various contexts, demonstrates, records and explains:**  -difference between exponent and base  - using powers for repeated multiplication  -a power with exponent 0 is equal to 1  - exponent laws  -order of operations with powers  -the role of brackets  -if answer is positive or negative  **Accurate and precise; rarely makes errors/omissions in:**  -expressing a power as repeated multiplication  - expressing repeated  multiplication as a power  -evaluating powers  -determining sums and differences of powers  -applying the order of operations | **Shows understanding; able to demonstrate, record and explain:**  -difference between exponent and base  - using powers for repeated multiplication  -a power with exponent 0 is equal to 1  - exponent laws  -order of operations with powers  -the role of brackets  -if answer is positive or negative  **Generally accurate; makes few errors/omissions in:**  -expressing a power as repeated multiplication  - expressing repeated  multiplication as a power  -evaluating powers  -determining sums and differences of powers  -applying the order of operations | **Some understanding; partially able to demonstrate, record or explain:**  -difference between exponent and base  - using powers for repeated multiplication  -a power with exponent 0 is equal to 1  - exponent laws  -order of operations with powers  -the role of brackets  -if answer is positive or negative  **Partially accurate; makes frequent minor errors/omissions in:**  -expressing a power as repeated multiplication  - expressing repeated  multiplication as a power  -evaluating powers  -determining sums and differences of powers  -applying the order of operations | **Little understanding; may be unable to demonstrate, record or explain:**  -difference between exponent and base  - using powers for repeated multiplication  -a power with exponent 0 is equal to 1  - exponent laws  -order of operations with powers  -the role of brackets  -if answer is positive or negative  **Limited accuracy; often makes major errors/omissions in:**  -expressing a power as repeated multiplication  - expressing repeated  multiplication as a power  -evaluating powers  -determining sums and differences of powers  -applying the order of operations |